IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND the claims in accordance with the following:

1. (CURRENTLY AMENDED) A method of controlling an identification level for an optical receiver wherein the optical receiver converts an optical signal from an optical fiber into an electric signal, uses a limiter amplifier to amplify the electric signal, and reproduces data, the method comprising ~~steps of~~:

changing an identification level supplied to the limiter amplifier ~~from~~ between a lower bound ~~to~~ and an upper bound thereof and storing ~~an~~ a respective average of an output of the limiter amplifier corresponding to each identification level together with the identification level;

setting a first average ~~of~~ between a minimal value of the respective averages ~~average~~ and a predefined value and a second average ~~of~~ between a maximal value of the ~~average~~ respective averages and the predefined value, said predefined value being between the minimal value and the maximal value, and obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average; and

computing an optimal identification level based on the first identification level and the second identification level and supplying the optimal identification level to the limiter amplifier.

2. (CURRENTLY AMENDED) The method as claimed in claim 1, wherein ~~when the minimal value and the maximal value are set as 0% and 100%, respectively, the first average and the second average are set as about 25% and about 75%, respectively~~the first average and the second average are substantially equal to 0.25(Min + Max) and 0.75(Min + Max), wherein the minimal value and the maximum value are represented by Min and Max, respectively.

3. (CURRENTLY AMENDED) The method as claimed in claim 1, wherein the optimal identification level is set ~~as a level of 30% through 40% in a level range between the first identification level and the second identification level~~between 0.3(Id1 + Id2) and 0.4(Id1 + Id2), wherein the first identification level and the second identification level are represented by Id1 and Id2, respectively.

4. (CURRENTLY AMENDED) A method of controlling an identification level for an optical receiver wherein the optical receiver converts an optical signal from an optical fiber into an electric signal, uses a limiter amplifier to amplify the electric signal, and reproduces data, the method comprising ~~steps of~~:

changing an identification level supplied to a monitoring limiter amplifier ~~from~~ between a lower bound ~~to~~ and an upper bound thereof, said monitoring limiter amplifier configured ~~to have a feature similar~~ similarly to the limiter amplifier and receiving the electric signal, and storing ~~an~~ a respective average of an output of the monitoring limiter amplifier corresponding to each identification level together with the identification level;

setting a first average ~~of~~ between a minimal value of the ~~average~~ respective averages and a predefined value and a second average ~~of~~ between a maximal value of the respective ~~average~~averages and the predefined value, said predefined value being between the minimal value and the maximal value, and obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average; and

computing an optimal identification level based on the first identification level and the second identification level and supplying the optimal identification level to the limiter amplifier.

5. (CURRENTLY AMENDED) The method as claimed in claim 4, wherein ~~when the minimal value and the maximal value are set as 0% and 100%, respectively, the first average and the second average are set as about 25% and about 75%, respectively~~ the first average and the second average are substantially equal to 0.25(Min + Max) and 0.75(Min + Max), wherein the minimal value and the maximum value are represented by Min and Max, respectively.

6. (CURRENTLY AMENDED) The method as claimed in claim 4, wherein the optimal identification level is set between 0.3(Id1 + Id2) and 0.4(Id1 + Id2), wherein the first identification level and the second identification level are represented by Id1 and Id2, respectively ~~as a level of 30% through 40% in a level range between the first identification level and the second identification level~~.

7. (CURRENTLY AMENDED) An optical receiver for converting an optical signal from an optical fiber into an electric signal, using a limiter amplifier to amplify the electric signal, and reproducing data, comprising:

a change part changing an identification level supplied to the limiter amplifier ~~from~~

between a lower bound ~~to~~ and an upper bound thereof;

a storage part storing ~~an~~ a respective average of an output of the limiter amplifier corresponding to each identification level together with the identification level; and

a computation part setting a first average ~~of~~ as a minimal value of the ~~average~~ respective averages and a predefined value and a second average ~~of~~ between a maximal value of the ~~average~~ respective averages and the predefined value, said predefined value being between the minimal value and the maximal value, obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average, computing an optimal identification level based on the first identification level and the second identification level, and supplying the optimal identification level to the limiter amplifier.

8. (CURRENTLY AMENDED) The optical receiver as claimed in claim 7, wherein ~~when the minimal value and the maximal value are set as 0% and 100%, respectively, the first average and the second average are set as about 25% and about 75%, respectively~~ the first average and the second average are substantially equal to 0.25(Min + Max) and 0.75(Min + Max), wherein the minimal value and the maximum value are represented by Min and Max, respectively.

9. (CURRENTLY AMENDED) The optical receiver as claimed in claim 7, wherein the optimal identification level is set between 0.3(Id1 + Id2) and 0.4(Id1 + Id2), wherein the first identification level and the second identification level are represented by Id1 and Id2, respectively~~as a level of 30% through 40% in a level range between the first identification level and the second identification level~~.

10. (CURRENTLY AMENDED) An optical receiver for converting an optical signal from an optical fiber into an electric signal, using a limiter amplifier to amplify the electric signal, and reproducing data, comprising:

a monitoring limiter amplifier configured ~~to have a feature similar~~similarly to the limiter amplifier and receiving the electric signal;

a change part changing an identification level supplied to the monitoring limiter amplifier ~~from~~ between a lower bound ~~to~~ and an upper bound thereof;

a storage part storing ~~an~~ a respective average of an output of the monitoring limiter amplifier corresponding to each identification level together with the identification level; and

a computation part setting a first average ~~of~~ between a minimal value of the ~~average~~ respective averages and a predefined value and a second average ~~of~~ between a maximal value

of the ~~average~~ respective averages and the predefined value, said predefined value being between the minimal value and the maximal value, obtaining a first identification level corresponding to the first average and a second identification level corresponding to the second average, computing an optimal identification level based on the first identification level and the second identification level, and supplying the optimal identification level to the limiter amplifier.

11. (CURRENTLY AMENDED) The optical receiver as claimed in claim 10, wherein the first average and the second average are substantially equal to 0.25(Min + Max) and 0.75(Min + Max), wherein the minimal value and the maximum value are represented by Min and Max, respectively~~when the minimal value and the maximal value are set as 0% and 100%, respectively, the first average and the second average are set as about 25% and about 75%, respectively~~.

12. (CURRENTLY AMENDED) The optical receiver as claimed in claim 10, wherein the optimal identification level is set between 0.3(Id1 + Id2) and 0.4(Id1 + Id2), wherein the first identification level and the second identification level are represented by Id1 and Id2, respectively~~as a level of 30% through 40% in a level range between the first identification level and the second identification level~~.